**IN THE CLAIMS**:

Please AMEND claims 20-30, 32 and 34-38 and ADD new claims 39-61 as follows.

1-19. (Cancelled)

20. (Currently Amended) A method ~~of carrying an application level message encapsulated inside a signaling message of an access network, said method~~ comprising ~~the steps of~~:

receiving an application level message from a sender application process to an access network signaling process;

~~adapting~~encapsulating said application level message ~~and encapsulating it~~ in a signaling message of an access network; and

~~delivering~~transmitting said encapsulated application level message to a ~~receiver application process~~network node by transmitting said signaling message, wherein

~~said encapsulated application level message is transparent to the means of said access network transmitting said signaling message, and~~

~~wherein~~said application level message ~~includes~~comprises an indication ~~under which~~of conditions to deliver the signaling message ~~should be delivered~~.

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21.    (Currently Amended)  A method according to claim 20, wherein said sender application process is performed in a mobile terminal ~~being attached~~coupled to said access network.


22.    (Currently Amended)  A method according to claim 20, wherein said sender application process is performed in an application server ~~providing~~configured to provide a corresponding application.


23.    (Currently Amended)  A method according to claim 20, wherein said indication comprises an address of the application receiver process, said address being one of the group comprising a logical name, an ~~IP~~internet protocol address, and a port number.


24.    (Currently Amended)  A method according to claim 20, wherein said indication comprises ~~another~~an indication of whether to deliver said signaling message ~~should be delivered even if~~when the ~~Q~~quality-of-~~S~~service changes.


25.    (Currently Amended)  A method according to claim 20, wherein said method is implemented in a call establishment procedure for a ~~V~~voice over the ~~I~~internet ~~P~~protocol.

26.     (Currently Amended)  A method according to claim 20, wherein said encapsulated application level message is included in an activation request within a ~~P~~packet ~~D~~data ~~P~~protocol context signaling.

27.     (Currently Amended)  A method according to claim 22, wherein said application server is one of the group ~~of~~comprising a proxy call state control function ~~means~~, a push proxy server ~~means~~, and an instant message server ~~means~~.

28.     (Currently Amended)  A method according to claim 26, wherein said packet data protocol context signaling is embedded into one of the group ~~of~~comprising a ~~S~~session ~~I~~initiation ~~P~~protocol signaling, a ~~R~~resource ~~R~~reservation ~~P~~protocol signaling, and a ~~P~~point to ~~P~~point ~~P~~protocol signaling.

29.     (Currently Amended)  A method according to claim 26, wherein said encapsulated application level message ~~includes~~comprises a complete ~~S~~session ~~I~~initiation ~~P~~protocol message.

30.     (Currently Amended)  A method according to claim 29, wherein said complete session initiation protocol message is forwarded by a ~~G~~gateway ~~GPRS~~general packet radio system ~~S~~support ~~N~~node ~~(GGSN) creates a Internet Protocol/User Datagram Protocol header and forwards said complete Session Initiation Protocol message~~ to a

Ssession Iinitiation Pprotocol proxy means, wherein said gateway general packet radio system support node is configured to create an internet protocol/user datagram protocol header and to forward said complete session initiation protocol message to a session initiation protocol proxy.

31.     (Previously Presented)  A method according to claim 30, wherein said header is created by using information sent in an optional application level message information element.

32.     (Currently Amended)  A method according to claim 30, wherein said header is created by using information coming from said Ppacket Ddata Pprotocol context signaling.

33.     (Previously Presented)  A method according to claim 30, wherein said header is created by using information coming from a configuration process.

34.     (Currently Amended)  A method according to claim 26, wherein said encapsulated application level message indicates that a Ggateway GPRSgeneral packet radio system Ssupport Nnode shall send a context response message only when a response of said receiver application process is received, as a reaction to which said Ggateway GPRSgeneral packet radio system Ssupport Nnode starts a timer to wait for an

answer.; and wherein a reply before the ~~expiry~~expiration of said timer is copied as a new

encapsulated application level message in said context response message, and in case of

no reply before the ~~expiry~~expiration of said timer, an indication that ~~said receiver~~

~~application process does not answer~~an answer was not received is copied as a new

encapsulated application level message in said context response message.


35.    (Currently Amended)  A method according to claim 26, wherein said

encapsulated application level message indicates that a ~~G~~gateway ~~GPRS~~general packet

radio system ~~S~~support ~~N~~node ~~shall~~is configured to send a context response message

immediately, as a reaction to which said ~~G~~gateway ~~GPRS~~general packet radio system

~~S~~support ~~N~~node sends a context response message immediately, whereas a response of

said receiver application process is returned to said sender application process in a non-

encapsulated manner as normal traffic.


36.    (Currently Amended)  A~~n~~ apparatus ~~system adapted to perform a~~

~~transmission of an application level message encapsulated inside a signaling message of~~

~~an access network~~, comprising:

receiving means ~~adapted to receive~~for receiving an application level message from

a sender application process to an access network signaling process;

~~adapting~~encapsulating means for encapsulating said application level message in a

signaling message of an access network; and

~~delivering~~transmitting means ~~adapted to deliver~~for transmitting said encapsulated application level message to a ~~receiver application processing means~~network node, ~~and~~ wherein

said application level message ~~includes~~comprises an indication ~~under which~~of conditions to deliver the signaling message ~~should be delivered~~.


37.    (Currently Amended)  A~~n~~ ~~system~~apparatus according to claim 36, ~~wherein~~~~further comprising~~ a server ~~adapted to perform~~is configured to perform said sender application process.


38. (Currently Amended)  A~~n~~ ~~system~~apparatus according to claim 37, wherein said server is one of the group ~~of~~comprising a proxy call state control function~~ means~~, a push proxy server means, and an instant message server~~ means~~.


39.    (New)  A method, comprising:

receiving an encapsulated application level message;

interpreting, from the encapsulated application level message, an address and conditions to send the encapsulated application level message;

extracting content from the encapsulated application level message; and

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forwarding the extracted content to an application server in accordance with one or more of the interpreted address, a packet data protocol context and an access point name configuration.

40.    (New)  The method of claim 39, wherein the conditions to send the encapsulated application level message comprise when a packet data protocol context is accepted or when a packet data protocol context is accepted with a desired quality of service.

41.    (New)  The method of claim 39, wherein, when the address is indicated as a logical name, the logical name is resolved from the access point name configuration or by querying a directory name service system.

42.    (New)  The method of claim 39, wherein the encapsulated application level message is included in an activation request within a packet data protocol context signaling.

43.    (New)  The method of claim 42, wherein the packet data protocol context signaling is embedded into one of the group comprising a session initiation protocol signaling, a resource reservation protocol signaling, and a point to point protocol signaling.

44. (New) The method of claim 42, wherein the encapsulated application level message comprises a complete session initiation protocol message.

45. (New) The method of claim 44, further comprising:

creating an internet protocol/user datagram protocol header; and

forwarding the complete session initiation protocol message to a session initiation protocol proxy.

46. (New) An apparatus, comprising:

a receiver configured to receive an encapsulated application level message;

a processor configured to

    interpret, from the encapsulated application level message, an address and conditions to send the encapsulated application level message, and

    extract content from the encapsulated application level message; and

a transmitter configured to forward the extracted content to an application server in accordance with one or more of the interpreted address, a packet data protocol context and an access point name configuration.

47. (New) The apparatus of claim 46, wherein the conditions to send the encapsulated application level message comprise when a packet data protocol context is

accepted or when a packet data protocol context is accepted with a desired quality of service.

48.    (New)  The apparatus of claim 46, wherein, when the address is indicated as a logical name, the apparatus is configured to resolve the logical name from the access point name configuration or by querying a directory name service system.

49.    (New)  The apparatus of claim 46, wherein the apparatus is configured to include the encapsulated application level message in an activation request within a packet data protocol context signaling.

50.    (New)  The apparatus of claim 49, wherein the apparatus is configured to embed the packet data protocol context signaling into one of the group comprising a session initiation protocol signaling, a resource reservation protocol signaling, and a point to point protocol signaling.

51.    (New)  The apparatus of claim 49, wherein said encapsulated application level message comprises a complete session initiation protocol message.

52.    (New)  The apparatus of claim 51, wherein the processor is further configured to create an internet protocol/user datagram protocol header and the

transmitter is further configured to forward the complete session initiation protocol message to a session initiation protocol proxy.

53. (New) An apparatus, comprising:

a receiver configured to receive an application level message from a sender application process to an access network signaling process;

a processor configured to encapsulate said application level message in a signaling message of an access network; and

a transmitter configured to transmit said encapsulated application level message to a network node, wherein

said application level message comprises an indication of conditions to deliver the signaling message.

54. (New) An apparatus according to claim 53, wherein said apparatus comprises a mobile terminal.

55. (New) A method according to claim 53, wherein said indication comprises an address of the application receiver process, said address being one of the group comprising a logical name, an internet protocol address, and a port number.

56.    (New) An apparatus according to claim 53, wherein said indication comprises an indication of whether to deliver said signaling message when the quality-of-service changes.

57.    (New) An apparatus according to claim 53, wherein the apparatus is configured to transmit the encapsulated application level message as part of a call establishment procedure for a voice over the internet protocol.

58.    (New) An apparatus according to claim 53, wherein the apparatus is configured to include said encapsulated application level message in an activation request within a packet data protocol context signaling.

59.    (New) An apparatus according to claim 59, wherein said apparatus is configured to embed said packet data protocol context signaling into one of the group comprising a session initiation protocol signaling, a resource reservation protocol signaling, and a point to point protocol signaling.

60.    (New) An apparatus according to claim 58, wherein said encapsulated application level message comprises a complete session initiation protocol message.

61.    (New)  An apparatus according to claim 58, wherein said encapsulated

application level message indicates that a gateway general packet radio system support

node is configured to send a context response message only when a response is received,

as a reaction to which said gateway general packet radio system support node starts a

timer to wait for an answer, and wherein a reply before the expiration of said timer is

copied as a new encapsulated application level message in said context response

message, and in case of no reply before the expiration of said timer, an indication that an

answer was not received is copied as a new encapsulated application level message in

said context response message.


62.    (New)  A system, comprising:

user equipment comprising

        a receiver configured to receive an application level message from a sender

application process to an access network signaling process,

        a processor configured to encapsulate said application level message in a

signaling message of an access network, and

        a transmitter configured to transmit said encapsulated application level

message to a network node; and

    a network node comprising

        a receiver configured to receive the encapsulated application level message,

        a processor configured to

interpret, from the encapsulated application level message, an address and conditions to send the encapsulated application level message, and

extract content from the encapsulated application level message, and

a transmitter configured to forward the extracted content to an application server in accordance with one or more of the interpreted address, a packet data protocol context and an access point name configuration, wherein

said application level message comprises an indication of conditions to deliver the signaling message.